

CLAIMS:

1. A cutting insert comprising a central body portion extending between two opposite end portions, each end portion being provided with a cutting edge; the central body portion being provided with upper and lower clamping abutment surfaces with first and second side surfaces extending therebetween; at least one of the first and second side surfaces being provided with an axial location member.

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2. A cutting insert in accordance with Claim 1, wherein the axial location member is a protrusion.

10 3. A cutting insert in accordance with Claim 2, wherein the protrusion is square shaped.

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4. A cutting insert in accordance with Claim 2, wherein the axial location member is a recess.

15 5. A cutting insert in accordance with Claim 1, wherein the upper and lower clamping abutment surfaces are sloped, defining therebetween a variable distance, so that when the cutting insert is viewed in an end view the distance between the upper and lower clamping abutment surfaces is a maximum at the first side surface and a minimum at the second side surface.

20 6. A cutting insert in accordance with Claim 1, wherein the upper and lower clamping abutment surfaces have the form of V-shaped protrusions.

7. A cutting insert in accordance with Claim 1, wherein the upper and lower clamping abutment surfaces have the form of V-shaped grooves.

8. A cutting tool assembly comprising:

a cutting insert holder; and

25 a cutting insert;

the cutting insert holder comprising:

an upper clamping jaw having an upper clamping surface;

a lower base jaw having a lower clamping surface;

30 at least one clamping screw passing through the upper clamping jaw and threadingly connected to the lower base jaw;

an insert holder inner side surface extending between the upper and lower clamping surfaces;

an insert pocket bound on two opposite sides by the upper and lower clamping surfaces and bound on a third side extending between the two opposite sides by the insert holder inner side surface; the insert holder inner side surface being provided with a positioning member;
the cutting insert comprising:

a central body portion extending between two opposite end portions, each end portion being provided with a cutting edge; the central body portion being provided with upper and lower clamping abutment surfaces with first and second side surfaces extending therebetween; at least one of the first and second side surfaces being provided with an axial location member;

wherein the upper clamping abutment surface abuts the upper clamping surface, the lower clamping abutment surface abuts the lower clamping surface and the positioning member engages the axial location member whereby the axial location of the cutting insert is fixed.

9. A cutting tool assembly in accordance with Claim 8, wherein the axial location member is a protrusion and the positioning member is a rear surface of a recess in the insert holder inner side surface.

10. A cutting tool assembly in accordance with Claim 9, wherein the protrusion is square shaped and the recess has a generally matching square shaped cross section.

11. A cutting tool assembly in accordance with Claim 9, wherein the axial location member is a recess and the positioning member is a protrusion on the insert holder inner side surface.

12. A cutting tool assembly in accordance with Claim 8, wherein the upper and lower clamping abutment surfaces are sloped, defining therebetween a variable distance, so that when the cutting insert is viewed in an end view the distance between the upper and lower clamping abutment surfaces is a maximum at the first side surface and a minimum at the second side surface and the upper

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and lower clamping surfaces of the upper clamping jaw and the lower base jaw, respectively, are matchingly sloped.

13. A cutting tool assembly in accordance with Claim 8, wherein the upper and lower clamping abutment surfaces have the form of V-shaped protrusions and the upper and lower clamping surfaces of the upper clamping jaw and the lower base jaw, respectively, have the form of matching V-shaped grooves.

14. A cutting tool assembly in accordance with Claim 8, wherein the upper and lower clamping abutment surfaces have the form of V-shaped grooves and the upper and lower clamping surfaces of the upper clamping jaw and the lower base jaw, respectively, have the form of matching V-shaped protrusions.

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